ASSOCIATING PLAYBACK DEVICES WITH PLAYBACK QUEUES

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of U.S. non-provisional patent application Ser. No. 16/295,830, filed on Mar. 7, 2019, entitled "Associating Playback Devices with Playback Queues," which is a continuation of U.S. non-provisional patent application Ser. No. 14/855,695, filed on Sep. 16, 2015, entitled "Associating Playback Devices with Playback Queues," which is a continuation of U.S. non-provisional patent application Ser. No. 13/944,702, filed on Jul. 17, 2013, entitled "Associating Playback Devices with Playback Queues," each of which is incorporated herein by reference in its entirety.

FIELD OF THE DISCLOSURE

[0002] The disclosure is related to consumer goods and, more particularly, to methods, systems, products, features, services, and other items directed to media playback or some aspect thereof.

BACKGROUND

[0003] Digital music has become readily available due in part to the development of consumer level technology that has allowed people to listen to digital music on a personal audio device. The consumer's increasing preference for digital audio has also resulted in the integration of personal audio devices into PDAs, cellular phones, and other mobile devices. The portability of these mobile devices has enabled people to take the music listening experience with them and outside of the home. People have become able to consume digital music, like digital music files or even Internet radio, in the home through the use of their computer or similar devices. Now there are many different ways to consume digital music, in addition to other digital content including digital video and photos, stimulated in many ways by high-speed Internet access at home, mobile broadband Internet access, and the consumer's hunger for digital media.

[0004] Until recently, options for accessing and listening to digital audio in an out-loud setting were severely limited. In 2005, Sonos offered for sale its first digital audio system that enabled people to, among many other things, access virtually unlimited sources of audio via one or more networked connected zone players, dynamically group or ungroup zone players upon command, wirelessly send the audio over a local network amongst zone players, and play the digital audio out loud in synchrony. The Sonos system can be controlled by software applications downloaded to certain network capable, mobile devices and computers.

[0005] Given the insatiable appetite of consumers towards digital media, there continues to be a need to develop consumer technology that revolutionizes the way people access and consume digital media.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] Features, aspects, and advantages of the presently disclosed technology may be better understood with regard to the following description, appended claims, and accompanying drawings where:

[0007] FIG. **1** shows an example configuration in which certain embodiments may be practiced;

[0008] FIG. **2**A shows an illustration of an example zone player having a built-in amplifier and transducers;

[0009] FIG. **2**B shows an illustration of an example zone player having a built-in amplifier and connected to external speakers;

[0010] FIG. **2**C shows an illustration of an example zone player connected to an A/V receiver and speakers;

[0011] FIG. **3** shows an illustration of an example controller;

[0012] FIG. **4** shows an internal functional block diagram of an example zone player;

[0013] FIG. **5** shows an internal functional block diagram of an example controller;

[0014] FIG. **6** shows an example network for media content playback;

[0015] FIG. **7** shows an example ad-hoc playback network;

[0016] FIG. **8** shows a system including a plurality of networks including a cloud-based network and at least one local playback network;

[0017] FIG. **9** illustrates a flow diagram of an example method to associate a playback device with a playback queue;

[0018] FIG. **10** illustrates a flow diagram of an example method to maintain and associate a playback device with at least one of a saved playback queue or a group queue;

[0019] FIG. **11** shows an example system including a plurality of playback queues and at least one associated example zone player.

[0020] In addition, the drawings are for the purpose of illustrating example embodiments, but it is understood that the inventions are not limited to the arrangements and instrumentality shown in the drawings.

DETAILED DESCRIPTION

I. Overview

[0021] A media playback device may be configured to play audio content from a playback queue associated with or assigned to the playback device. In some examples, the playback device may be grouped with another playback device to play audio in synchrony, and in some examples, a playback queue is associated with or assigned to the group. At some point, the playback device may be removed from the group. Upon removal of the playback device from the group, a user may wish to play audio from the playback device, either at the time of removal from the group or at a later time, without manually reassigning the playback device to a playback queue.

[0022] Creation of playback queues is an important element in playing audio from a playback device or a group of playback devices. In some examples, a user may create a playback queue and assign a playback device (or group of playback devices) to the playback queue at the time of creation of the playback queue. In other examples, a user may create a playback queue, however, the user may choose not to assign a playback device (or group of playback devices) to the playback queue until a later time such that the playback queue persists without being assigned to a playback device (or group of playback devices).

[0023] Example methods, apparatus, systems, and articles of manufacture disclosed herein enable a playback device to automatically associate with a playback queue such that the playback device is continuously enabled to play content